NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

Fish Stream Improvement

(Feet)

Code 395

DEFINITION

Improving a stream channel to make a new fish habitat or to enhance an existing habitat.

PURPOSES

To increase the production of desired species of fish.

CONDITIONS WHERE PRACTICE APPLIES

Applicable in streams where poor habitat limits production of desired species. Applicable within any perennial stream which has the quality and quantity of water for species considered. This includes the stream banks (and berms) which affect the stream itself during normal flow.

CRITERIA

Criteria are not available for this practice.

CONSIDERATIONS

Quantity

1. Effects on the water budget.

Quality

 Effects on channel erosion and the movement of sediment and soluble and sediment attached substances that would be carried by runoff.

- 2. Effects on wetlands or water-related wildlife habitats.
- 3. Short-term and construction-related effects on the quality of water resources.
- 4. Effects on stream temperatures to provide desired effects for aquatic and wildlife communities.
- 5. Effects on the visual quality of water resources.

PLANS AND SPECIFICATIONS

- Help the stream create and maintain a series of pools and riffles. Stream bottom between pools should be natural or if constructed should be parabolic, tilted or V-notched fishway, but <u>not</u> a "wide flat" bottom.
 Concentrate flow for pools by the installation of deflectors such as boulders, poles, logs, gabions, etc. Permits may be required. Check with Indiana Department of natural Resources and U.S. Army Corps of Engineers before performing any in-stream work. Check with Maintain natural appearance as much as possible.
 - a.) For trees suitable for windbreaks, ornamental plantings, critical area plantings, recreation planting, and wildlife plantings, refer to Windbreak Planting Groups in Section 11-N of the Indiana Technical Guide.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

- b.) Capacity of fishway for small mouth bass and/or trout must carry average flow from mid-June through mid-September to avoid solar heating above fish species tolerance. Keep fishway on south or west side of stream to maximize available shade.
- Fence to protect streams and stream banks from damage by livestock. Include major and minor gullies within the fenced area. Provide stabilized livestock watering ramps and crossings as needed.
- Riprap as needed to prevent bank erosion. Install riprap to create and maintain deep water where possible.
- 4. Provide fish cover with overhanging banks, vegetation, large boulders and/or logs.

- Remove debris blocks that tend to dam up stream or those causing undue restriction for canoes or light row boats. Such removal should be done with a minimum of stream bank disturbances.
- 6. Clean up litter and post against dumps where applicable.
- 7. Strive to reduce and prevent pollution from all sources.

OPERATION AND MAINTENANCE

Operation and maintenance requirements are not applicable for this practice.